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PAST, PRESENT, AND FUTURE

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DESCRIPTIVE TAXONOMY: PAST, PRESENT, AND FUTURE

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The adjective 'descriptive' is used deliberately in my title. This paper focuses upon those taxonomic activities which provide species descriptions, nomenclature, classifications, and identification aids. There is more to taxonomy than this, so the distinction is important.

All biological data relate in some way to organisms, and such data can nearly always be usefully stored and indexed using the names of those organisms. For this reason, the orderly acquisition of biological knowledge has required the development of a set of nomenclatural procedures by which every biological species might ultimately be distinguished. Thus, taxonomy provides an essential infrastructure supporting all comparative biology. Without the nomenclatural and classificatory systems being generated by taxonomists, it would not be possible for entomologists to record, report, or retrieve in a systematic way the wealth of biological information being gathered about insects. It is entirely appropriate to this bicentenary review that we should examine the achievements and future prospects of descriptive insect taxonomy in Australia.

I am fully aware that the essentially morphologically defined species which we are forced to use in making the first taxonomic outline of our fauna might well not withstand the stress of time or detailed analysis. Yet it is essential to taxonomy itself that we provide a first framework, so that more detailed work can proceed. This framework is always in a sense provisional, and its structure must be progressively refined as we better understand biological relationships, such as those between sibling species, which are often

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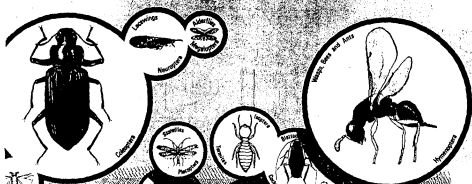
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